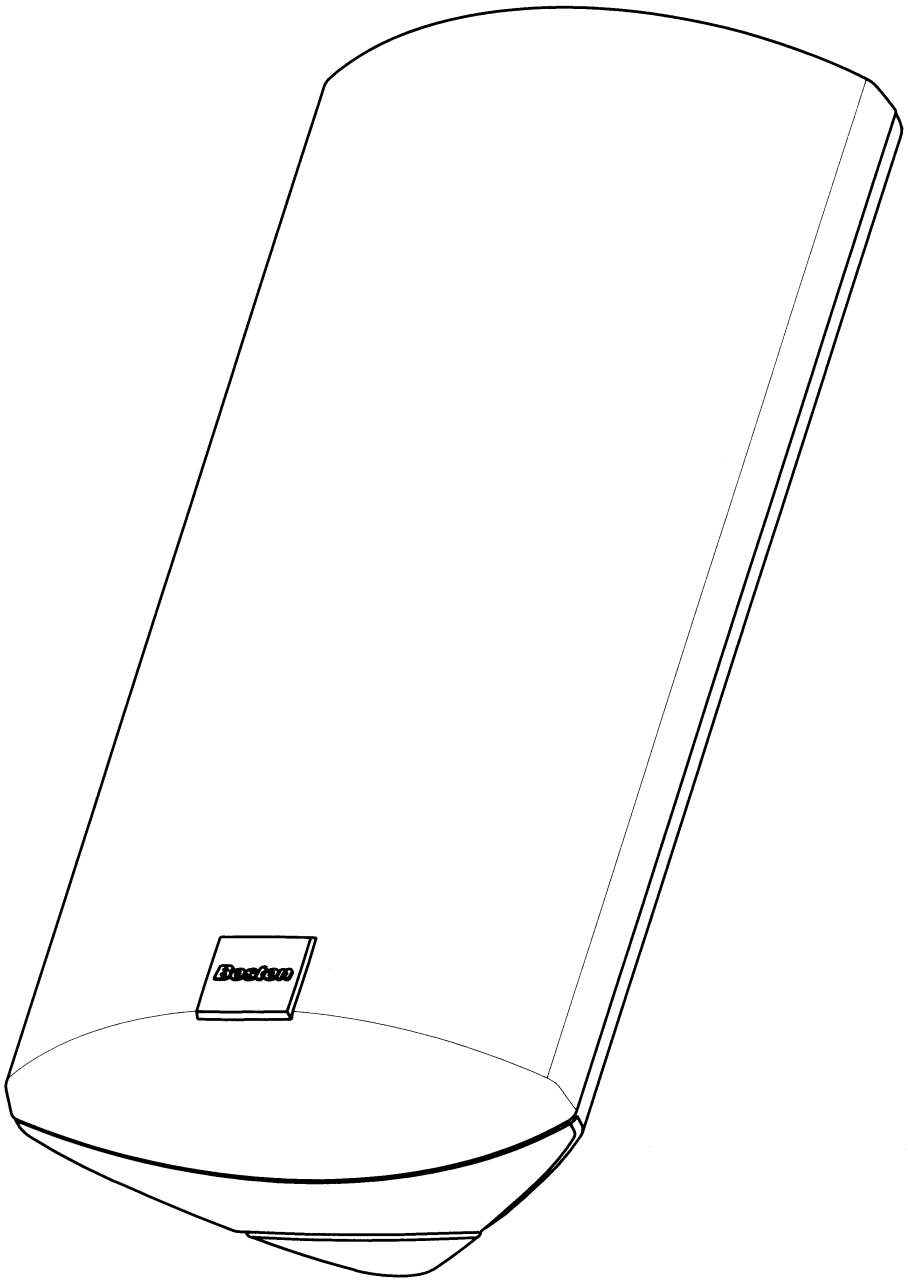
Boston Bravo

High Performance Multi-Purpose Speaker



Boston

Boston Acoustics

Specifications

Frequency Response (±3dB)	80–20,000Hz
Recommended Amplifier Power	15–125 watts
Nominal Impedance	8 ohms
Sensitivity [1 watt (2.83v) at 1m]	89dB
Bass Unit	4½" (115mm) copolymer
Tweeter	1" (25mm) black anodized aluminum dome with AMD
Crossover Frequency	2500Hz
Dimensions (HxWxD) with corner fillers	14¼ x 6½ x 5¼" (362 x 166 x 134mm)
Dimensions (HxWxD) without corner fillers	14¼ x 6½ x 4¼" (362 x 166 x 108mm)
Weight	5 lbs (2.25kg)
Finish	White or black textured ABS with matching cloth grille

Description

The Boston Bravo™ is a multi-purpose, high performance compact loudspeaker. The Boston Bravo, which uses Boston's patented one-inch aluminum dome VR tweeter with AMD and a 4½-inch woofer, can be combined with its supplied mounting bracket or rear stand to be mounted or placed virtually anywhere in any room.

The Boston Bravo is essentially one-quarter of a cylinder, allowing it to be mounted vertically at any height in a corner, or horizontally at the top of a wall, where wall and ceiling meet. Attaching the Boston Bravo to any surface is as simple as mounting the bracket to the wall, removing the grille from the speaker, and then attaching the speaker to the bracket using the supplied screws. Once the grille is placed back on the speaker, the means of attachment becomes virtually invisible. Additionally, the Boston Bravo can be placed either horizontally or vertically on any flat surface, such as a table or a shelf. Horizontally, it can either angle upward by resting on its two corner fillers or sit untilted using the rear stand.

By virtue of its patented VR tweeter, the Boston Bravo is an economical and appropriate choice as a surround speaker for any Boston system using similarly equipped main and center channel speakers: VR-M50, 60, 80, 90 and VR-MC; VR940, 950, 965, 975, 910 and 920; MR90x, 100x and 90c. However, since it shares the Boston Sound™ with all other Boston speakers, the Boston Bravo can be used successfully as a surround speaker with any Boston main and center channel speakers. The Boston Bravo can also be used in conjunction with any of today's widely available quality loudspeaker brands.

Because it is designed as a high-performance, general-purpose speaker, the Boston Bravo is suitable for any high-fidelity application where it is important that the speaker blends into its surroundings. The Boston Bravo is well suited for background and whole house music applications. The Boston Bravo's highly flexible mounting bracket allows it to be placed in a wide variety of locations, and to for the speaker to be angled for optimum sound quality and three-dimensional imaging. When a pair is placed vertically in the corners of a room, the Boston Bravo creates an unusually wide listening window, providing true stereo sound reproduction over a broad area.

For full-range applications, it is recommended that the Boston Bravo be used in conjunction with one of Boston's powered subwoofers: PV400, 600, 800 or 1000. The Boston Bravo's low frequency limit is 80Hz, allowing for a great deal of placement flexibility for the subwoofer. The Boston Bravo's robust design allows it be used with full-range signals and amplifiers rated between 15 and 125 watts. Please note that the Boston Bravo is not magnetically shielded. Therefore, it should not be placed closer than 18 inches from a tube television. The Boston Bravo may be used safely near projection and plasma televisions.

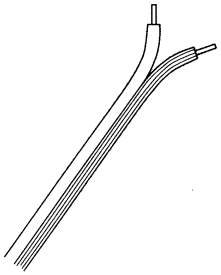
How to Connect Your Speakers

Correctly wiring your speakers is important for achieving the best sound quality. Wiring should take just a few minutes, but it's important to do it carefully, since incorrect wiring (such as reversed connections) can result in a poor soundstage and poor bass.

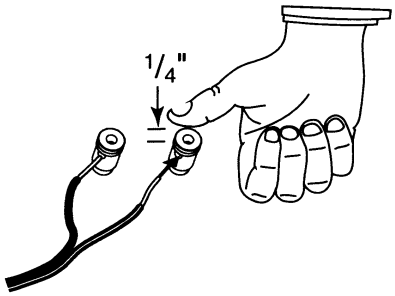
We recommend 18-gauge wire or thicker for runs up to 15 feet (4.5m), and 16-gauge wire or thicker for longer runs. Separate the first few inches of the wire conductors. Strip off 1/2-inch (12mm) of insulation from the ends of each speaker wire to expose the two conductors and tightly twist the wire strands.

WARNING: To prevent electrical shock hazard, always switch off the amplifier or receiver when making connections to the speaker.

When making all connections, be sure to connect the + (red) on the speaker to the + (red) on the amplifier, and the – (black) on the speaker to the – (black) on the amplifier.



IMPORTANT: Typically, one side of the wire is smooth. Connect this side to the – (black) connection. The other side has a rib or stripe. Connect this to the + (red) connection.



Using the spring terminal posts: The spring terminal posts permit easy connection to banana plugs, spade lugs, and bare wire.

Push the the top of the terminal down by approximately 1/4-inch, exposing the hole. Insert the wire in the hole and release the terminal.

Checking the Speaker Connections

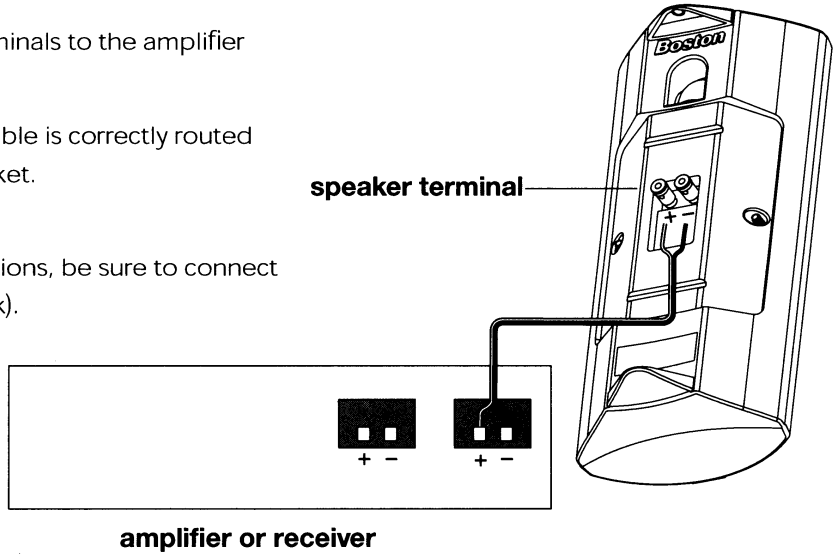
It is important that your speakers are hooked up with similar polarity or "in phase." A simple listening test will tell you if your speakers are connected properly. Place the speakers face to face, as closely together as possible. While listening to music with your amplifier set to MONO, reverse the connections at one speaker only. You'll hear a dramatic change in sound. The connection that yields the fuller bass and louder sound is correct.

Connecting the Boston Bravo to Your Amplifier or Receiver

1. Connect the speaker terminals to the amplifier speaker outputs.

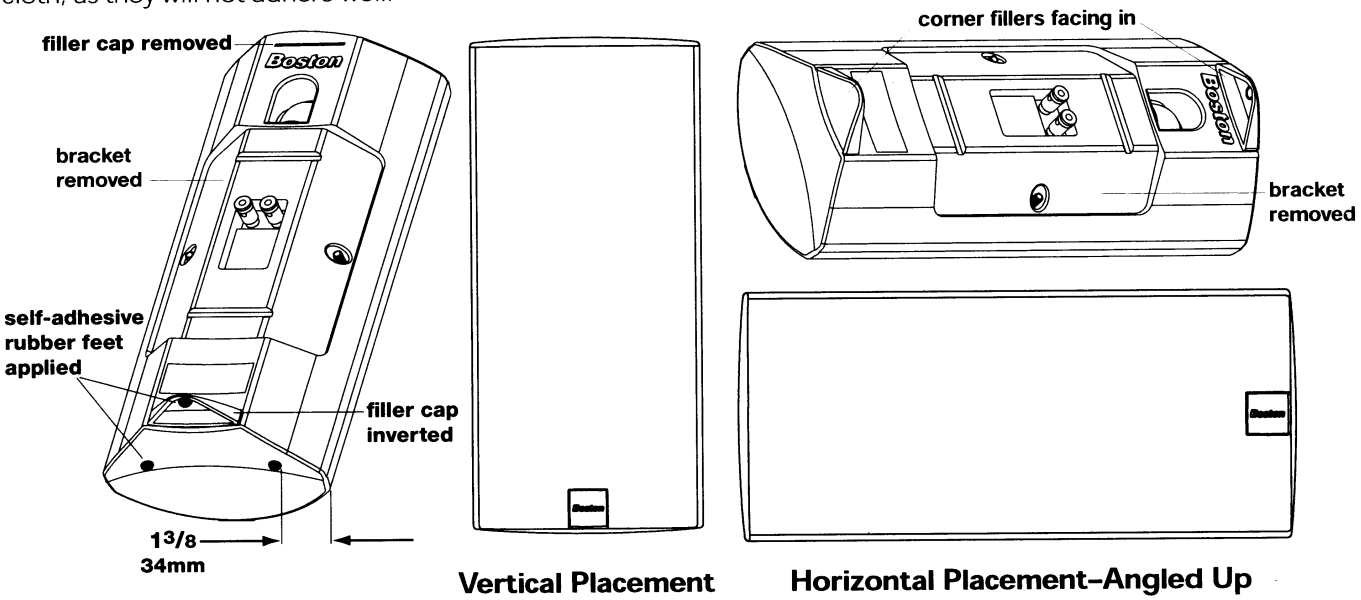
2. Make sure the speaker cable is correctly routed through the mounting bracket. (see Mounting Options)

3. When making all connections, be sure to connect + to + (red) and – to – (black).



Using the Boston Bravo on a Flat Surface

The Boston Bravo can be used on a flat surface, such as a table, shelf or the floor. For horizontal placement that tilts up at 45°, both corner fillers must be used and the bracket must be removed. For untilted horizontal placement, the rear stand must be used *with the mounting bracket attached* (see "Mount the Speaker to the Bracket" on page 6 and the "Rear Stand Installation Instructions" in the enclosed bag that contains the stand). For vertical applications, a single corner filler must be used on the end that will sit on the surface and the bracket should be removed. Invert the corner filler so that the small, circular recess faces outward. Attach one of the supplied self-adhesive rubber feet so that its edge contacts the diameter of the recess. Apply two more feet, each at 1⅜-inch (34mm) from the outer edge of the plastic housing where it meets the grille (as shown below left). Do not apply the feet to the grille cloth, as they will not adhere well.

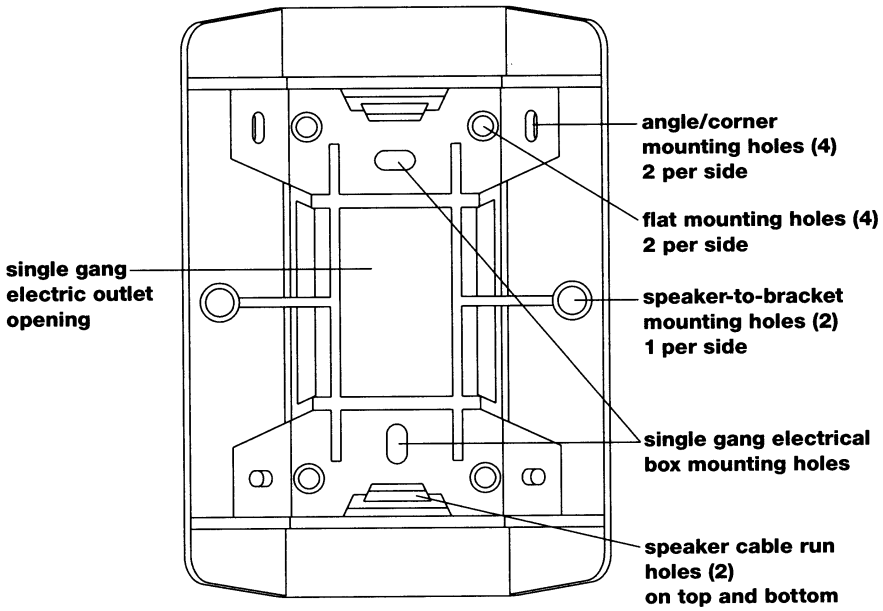


Vertical Placement **Horizontal Placement–Angled Up**

Mounting the Boston Bravo

Identify the Bracket

When removed from its packing material, the Boston Bravo's mounting bracket is fitted into the back of the speaker. Remove the tape that is temporarily holding the bracket to the speaker, and then pull the bracket away from the back of the speaker. Determine how the Boston Bravo is to be mounted to the wall or ceiling. It can be mounted either horizontally or vertically, either on an open section of wall, or where two or three room surfaces meet. Refer to the illustration here to determine what screw holes on the Boston Bravo bracket should be used for your application.


angle/corner mounting holes (4) 2 per side
flat mounting holes (4) 2 per side
single gang electric outlet opening
speaker-to-bracket mounting holes (2) 1 per side
single gang electrical box mounting holes
speaker cable run holes (2) on top and bottom

NOTE: The large rectangular hole in the middle of the bracket will fit a single gang electrical outlet to route the speaker wire through a conduit.

Mount the Bracket to the Wall

Decide where to mount bracket.
IMPORTANT: See "Ceiling Clearance" on page 6.

Determine what mounting holes in the bracket will be used.

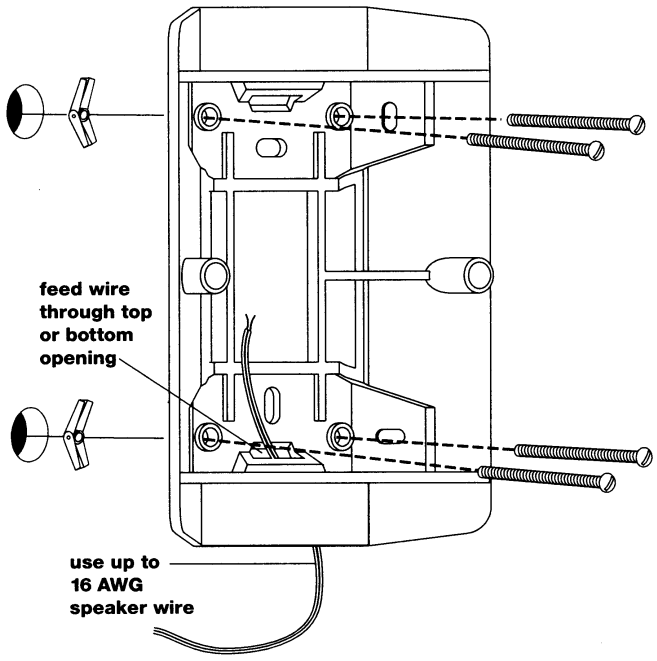
Mark the holes on the wall or ceiling using bracket as a template.

Drill the holes using the appropriate drill bit size to accommodate the mounting hardware that you plan to use (ie, ½-inch diameter to clear the toggle bolts for hollow surfaces or small enough to allow self-tapping screws in a solid surface).

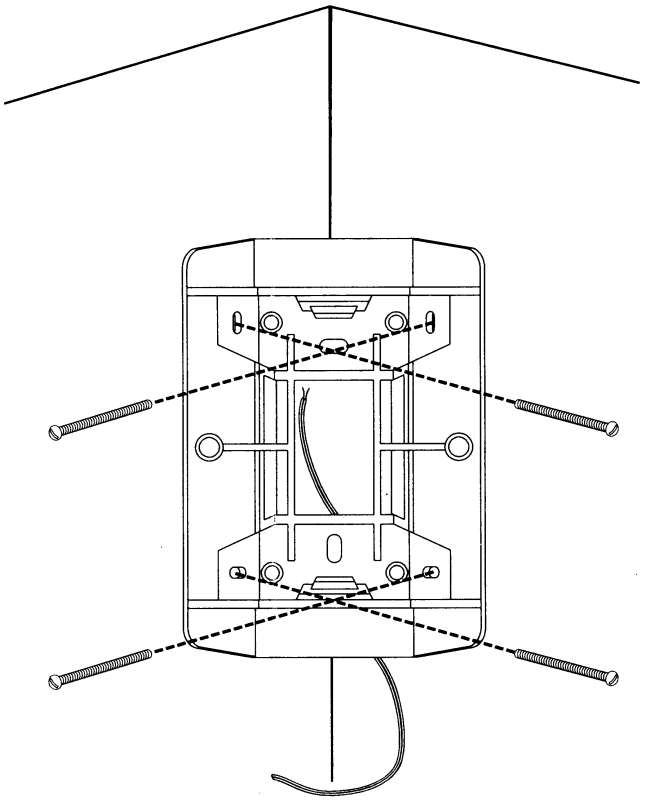
Mount the bracket flat or into a corner as shown below. We recommend the use of four fasteners wherever possible. Consult a knowledgeable installer regarding the proper hardware to use on your wall.

Strip the speaker wires ends, and feed the speaker wire through the appropriate bracket opening.

Connect the wire to the speaker's terminals, taking care to maintain speaker polarity. (See "How to Connect Your Speakers" and "Basic Hookup" on page 3). Both the Boston Bravo and its bracket are symmetrical, so the speaker can be mounted with either its woofer or tweeter on top. In general, bass performance will be enhanced with the woofer as close to as many room surfaces as possible.



Flat Mount Example

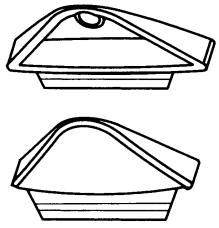


Corner Mount Example

Corner Fillers

If the Boston Bravo is being mounted in a corner, then one or both of the supplied corner fillers may be inserted into the slots on the back of the speaker. These accessories will enhance the appearance of the installation by making it appear that the back of Boston Bravo extends into the corner.

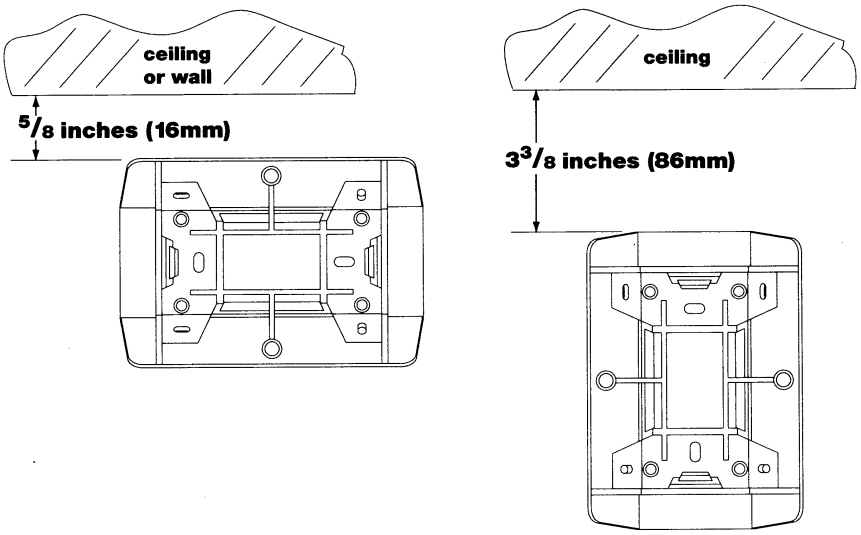
NOTE: Up to 16-gauge speaker wire will fit between the fillers and the corner.



corner filler (2)

Ceiling Clearance

If the Boston Bravo is to be mounted so that the top or the side of the speaker will meet a flush surface, either a wall (horizontally) or the ceiling (vertically), then measure the exact distance as shown here from that surface to the top or side of the bracket.



Mount the Speaker to the Bracket

Remove the speaker's grille by grasping the back of the cabinet in one hand, while gently pulling the grille away with the other hand.

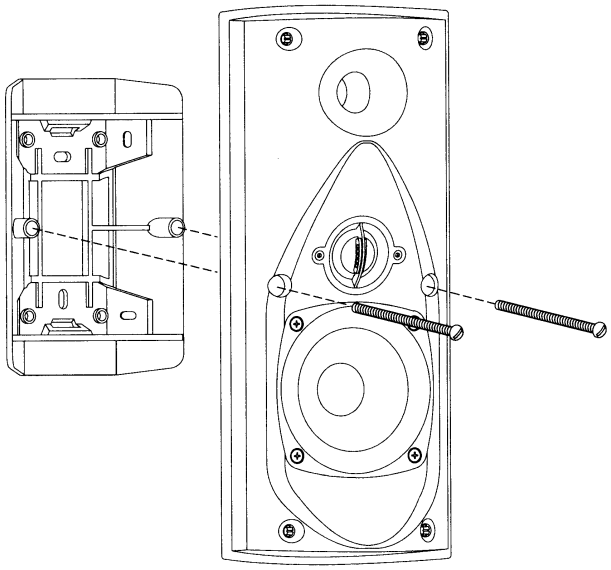
Align the openings in the back of the speaker with the two posts protruding from the bracket as shown below.

Gently remove any slack in the speaker wire as you push the speaker firmly onto the bracket.

Attach the speaker to the bracket by inserting the supplied screws through the holes in the front of the speaker and into the bracket as shown below *(do not over-tighten the screws)*.

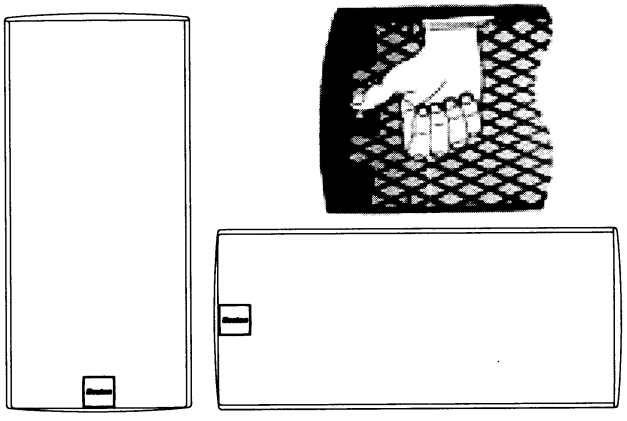
Replace the grille on the speaker.

NOTE: The Boston Bravo is not securely attached to its bracket unless the screws are used.



Rotating the Logo for Horizontal Mounting or Placement

The logo plate on the Boston Bravo's grille can be rotated 90° in either direction to enhance the speaker's appearance when mounting or placing it in a horizontal position.



To rotate the logo:

Remove the grille and turn it over.

Locate the logo's split post protruding through the bottom inside portion of the grille.

Place your thumb against the split post and press firmly until the logo pops out of the grille.

Rotate the logo to the desired position and re-insert the split post back into the hole until it snaps into place.

Using the Boston Bravo as a Surround Speaker

Two Boston Bravos can be used as surround speakers for Dolby® Surround, Dolby® Pro Logic®, Dolby® Digital and DTS® surround sound formats. A third or fourth Boston Bravo can be added for use with Surround EX and DTS® ES surround sound formats. In general, best results will be obtained when the surround speakers are placed above ear level and either behind or beside the listening area. However, if attaching speakers to the wall is not an option, then the Boston Bravos can be placed horizontally directly on the floor. Since the low frequency limit of the Boston Bravo is approximately 80Hz, speaker bass management should be set to "small." This will redirect the surround channels' bass information to either the system's subwoofer or main speakers. Please consult your surround sound electronics owner's manual for additional information about speaker placement and bass management

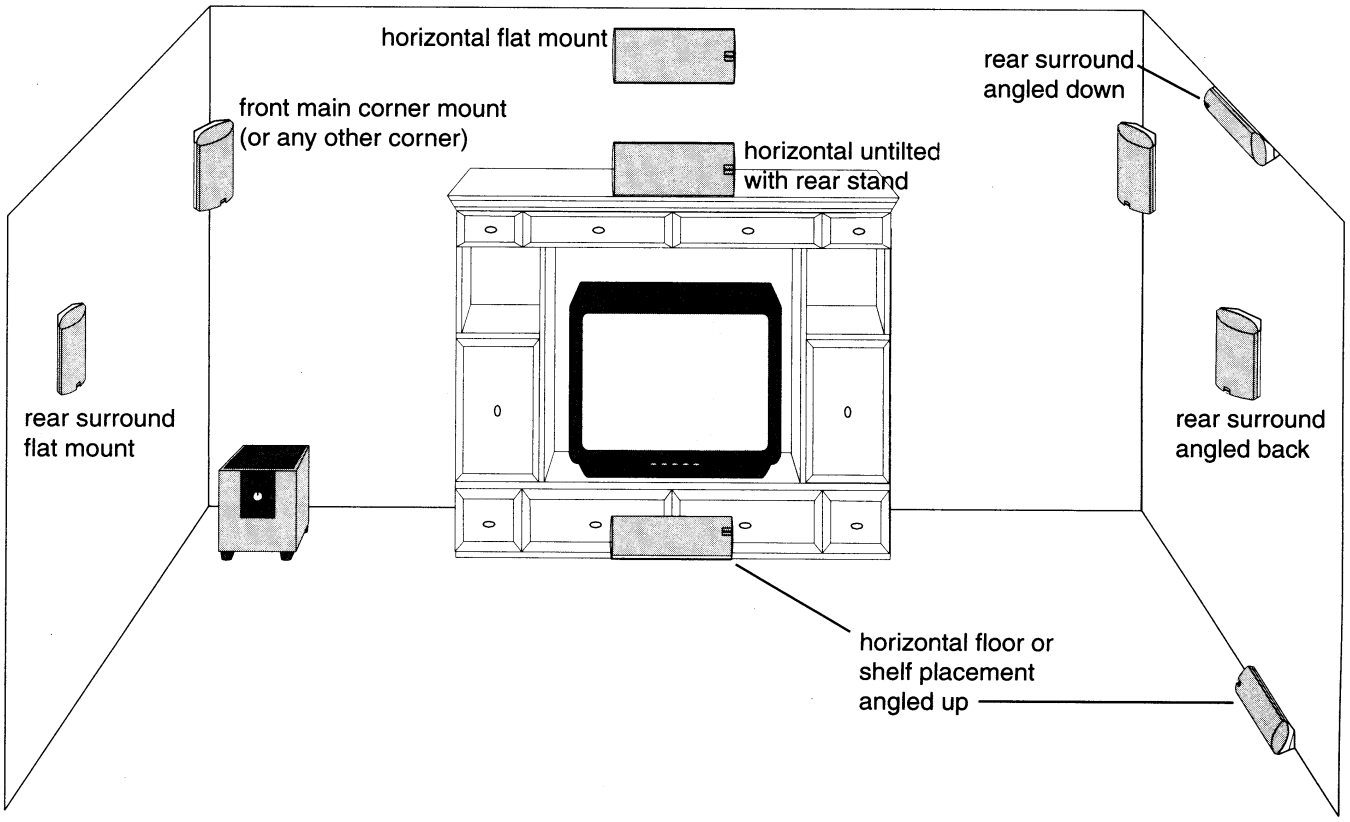
Using the Boston Bravo as a Main Speaker

The Boston Bravo can provide exceptional performance from 80Hz and above. For deep bass reproduction, a powered subwoofer might be a suitable addition to the Boston Bravo. In small or medium size rooms, two Boston Bravos should provide ample volume, given appropriate amplifier power of between 15 and 125 watts. In larger spaces, additional Boston Bravos may be necessary.

For broad, stereo coverage, vertical corner mounting of the Boston Bravo will produce excellent results. This technique will work especially well in situations where the distance between the two speakers is approximately 12 to 18 feet.

Mounting Possibilities of the Boston Bravo

We designed the Boston Bravo to be mounted or placed in a wide variety of configurations. Shown below are seven of the most common possibilties for you to consider.



Listening Levels and Power Handling

The listed power recommendations in the Specifications section assume you will operate your system in a way that will not produce distortion. Even these rugged speakers can be damaged by a modest amplifier if it produces distortion. If you hear a harsh, gritty noise, turn down the volume. Prolonged or repeated operation of your speaker with a distorted signal from the amplifier can cause damage that is not covered by the warranty.

Limited Warranty

For five years from the date of purchase, Boston Acoustics will repair for the original owner any defect in materials or workmanship that occurs in normal use of the speakers, without charge for parts and labor.

Your responsibilities are to use the system according to the instructions supplied, to provide safe and secure transportation to an authorized Boston Acoustics service representative, and to present proof of purchase in the form of your sales slip when requesting service.

Excluded from this warranty is damage that results from abuse, misuse, accidents, shipping, or repairs or modifications by anyone other than an authorized Boston Acoustics service representative.

This warranty is void if the serial number has been removed or defaced.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If Service Seems Necessary

First, contact the dealer from whom you purchased the speakers. If that is not possible, write to:

Boston Acoustics, Inc. 300 Jubilee Drive Peabody, MA 01960 U.S.A.

We will promptly advise you of what action to take. If it is necessary to return your speaker to the factory, please ship it prepaid. After it has been repaired, we will return it freight prepaid in the U.S.A. and Canada.

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www.bostonacoustics.com

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